

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/605,372	09/25/2003	Jan WIGREN	07589.0056.NPUS01	2371
28694	7590 07/27/2006		EXAMINER	
NOVAK DRUCE & QUIGG, LLP			BLACKWELL RUDASIL, GWENDOLYN A	
1300 EYE STI 400 EAST TO			ART UNIT	PAPER NUMBER
WASHINGTO	ON, DC 20005		1775	
			DATE MAILED: 07/27/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

		•	
	Application No.	Applicant(s)	
-	10/605,372	WIGREN ET AL	
Office Action Summary	Examiner	Art Unit	
	Gwendolyn Blackwell	1775	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 136(a). In no event, however, may a re will apply and will expire SIX (6) MON' e, cause the application to become AB	CATION. cply be timely filed THS from the mailing date of this communication ANDONED (35 U.S.C. § 133).	
Status			
 Responsive to communication(s) filed on <u>05 M</u> This action is FINAL. 2b) This Since this application is in condition for allowed closed in accordance with the practice under M 	s action is non-final. ance except for formal matte		
Disposition of Claims			
4) ☐ Claim(s) 1,3-10 and 12-27 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) 1 and 3-10 is/are allowed. 6) ☐ Claim(s) 12-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 25 September 2003 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the E	/are: a)⊠ accepted or b) e drawing(s) be held in abeyan ction is required if the drawing(ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Apority documents have been au (PCT Rule 17.2(a)).	oplication No received in this National Stage	
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s	ummary (PTO-413))/Mail Date formal Patent Application (PTO-152) 	

Application/Control Number: 10/605,372 Page 2

Art Unit: 1775

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant's disclosure does not appear to teach any other microstructural differences other than porosity, which imparts the differences in thermal conductivity and strength. Therefore, Applicant is only enabled for a microstructure that is different in porosity. Independent claims should reflect that the porosity is

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

the microstructural difference.

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 27 is rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication no. 0 605 196, EP '196.

Art Unit: 1775

EP '196 disclose the deposition of a ceramic thermal barrier coating comprised of a first

layer having zero porosity and a second layer formed on the first layer having a greater porosity.

The layers are deposited using powdered materials, (columns 3-4, lines 41-37), meeting the

limitations of claim 27.

Allowable Subject Matter

5. Claims 1 and 3-10 are allowed over the prior art of record. The following is an

examiner's statement of reasons for allowance:

The closest prior art of record while teaching the use of a two layered thermal barrier

coating having a lower layer that is more dense than the upper layer, does not teach or suggest

the combination of the coating in addition to the upper layer having the pore limitations as

exemplified by Applicant.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Response to Arguments

6. Applicant's arguments, see pages 6-9, filed May 5, 2006, with respect to claims 1-11

have been fully considered and are persuasive. The rejection has been withdrawn with regards to

the art rejections made over claims 1-26. The 112 rejection of claims 1-26 has been withdrawn

with regards to claims 1-11. The rejection has been maintained with regards to claims 1-27 for the reasons set forth above.

7. Applicant's arguments filed May 5, 2006 have been fully considered but they are not persuasive with regards to the 112-enablement rejection over claims 12-26. Applicant contends that an amendment to claim 12, recites the limitation "that the porosity of the first layer is different from that of the second layer". There has been no such amendment to claim 12. As such, the rejection of claims 12-23 under 35 USC 112 paragraph 1 is maintained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/605,372 Page 5

Art Unit: 1775

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell whose telephone number is (571) 272-

1533. The examiner can normally be reached on Monday - Thursday; 6:30 am - 5:00 pm.

organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gwendolyn Blackwell Examiner Art Unit 1775

gab

JOHN J. ZIMMERMAN PRIMARY EXAMINER